EVALUATION REPORT FOR PERMIT TO OPERATE

Applicant's Name: PACTIV CORP Facility ID: 21474

Mailing Address: 15221 CANARY AVENUE
LA MIRADA, CALIFORNIA 90638

Equipment Location: SAME

Modifications are shown in bold italic, original in bold strike-though.

APPICATION NO. 447655 – Modification of Extruder R-100 (PO F15850 A/N: 333273) (D3)

MODIFICATION OF EXISTING POLYSTYRENE EXTRUSION RECLAIM LINES (PROCESS 1) RECLAIM EXTRUDER R-100 (SYSTEM 1) BY:

THE ADDITION OF:

- **A vacuum pump, 5 HP to Device D3**

Equipment	ID No.	Connected to	RECLAIM Source Type/ Monitoring Unit	Emission and Requirements	Conditions
Process 1: Polystyrene Extrusion Reclaim Lines					
System 1: Extruder, Reclaim, R-100					
EXTRUDER, R-100, NRM PACEMAKER, 300-H.P., WITH 14 ELECTRICAL HEATERS, 84 KW, ***AND A VACUUM PUMP, 5 HP*** A/N: ~~333273~~ ***447655***	D3	D6 C61		PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; ***[RULE 1175, 9-7-2007]***	M333.1
HOPPER, SURGE, 1900 LBS CAPACITY A/N: ~~333273~~ ***447655***	D4	C7		PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; ***[RULE 1175, 9-7-2007]***	D323.1
PELETIZER, ~~10~~ ***6.5***-H.P. A/N: ~~333273~~ ***447655***	D5	D6		PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; ***[RULE 1175, 9-7-2007]***	
SCREEN, CLASSIFYING, 2-H.P. A/N: ~~333273~~ ***447655***	D6	D3 D5		PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; ***[RULE 1175, 9-7-2007]***	

APPICATION NO. 447656 – Modification of Extruder R-200 (PO F15443 A/N: 333274)

MODIFICATION OF EXISTING POLYSTYRENE EXTRUSION RECLAIM LINES (PROCESS 1) RECLAIM EXTRUDER R-200 (SYSTEM 2) BY:

THE REMOVAL OF:

- **1400 lbs capacity surge Hopper, (D9)**
- **Filter (C10), And;**

THE ADDITION OF:

- **1900 lbs capacity surge Hopper, (D84)**
- **Filter (C85)**

Equipment	ID No.	Connected to	RECLAIM Source Type/ Monitoring Unit	Emission and Requirements	Conditions
Process 1: Polystyrene Extrusion Reclaim Lines					P1.2
System 2: Extruder, Reclaim, R-200					
EXTRUDER, R-200, NRM., WITH 18 ELECTRICAL HEATERS, 180 KW A/N: ~~333274, (SUPERCEDED BY 411091)~~ *447656*	D8	D12 C60		PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; ***[RULE 1175, 9-7-2007]***	M333.1
~~HOPPER, SURGE, 1400 LBS CAPACITY A/N: 333274, (SUPERCEDED BY 411091)~~	~~D9~~	~~C10~~		~~PM: (9) [RULE 405, 2-7-1996]~~	~~D323.1~~
HOPPER, SURGE, 1900 LBS CAPACITY A/N: 447656	***D84 (NEW)***	***C85***		***PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; [RULE 1175, 9-7-2007]***	***D323.1***
~~FILTER, MIKRO-PUL, MODEL 64S8, WITH FABRIC FILTER, WIDTH: 5FT 6IN; LENGTH: 5FT 6IN; 9,425 SQ.FT.; HEIGHT: 7FT 9IN A/N: 333274, (SUPERCEDED BY 411091)~~	~~C10~~	~~D9 C55~~		~~PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]~~	~~D322.1, E102.1, K67.2~~
FILTER CARTRIDGE, POLYESTER, 578 SQ. FT., 16 CARTRIDGES, EACH 0'-6" DIA. 3'-3"L. A/N: 447656	***C85 (NEW)***	***D84 C55***		***PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994], [RULE 1175, 9-7-2007]***	***D322.1, E102.1, K67.2***
PELLETIZER, WATER RING, 6.5-H.P. A/N: ~~333274, (SUPERCEDED BY 411091)~~ *447656*	D11	D12		PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; ***[RULE 1175, 9-7-2007]***	
SCREEN, CLASSIFYING, VIBRATING, 1-H.P. A/N ~~333274, (SUPERCEDED BY 411091)~~ *447656*	D12			PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; ***[RULE 1175, 9-7-2007]***	
CONVEYOR, PNEUMATIC, POLYSTYRENE PELLETS, WITH A 5 H.P. BLOWER A/N: ~~411091~~ *447656*	D90				
HOPPER, SURGE, CYCLONE, 100 LB CAPACITY. A/N: ~~411091~~ *447656*	D87			PM: (9) [RULE 405, 2-7-1996]	
HOPPER, WEIGHING, 100 LB CAPACITY. A/N: ~~411091~~ *447656*	D88			PM: (9) [RULE 405, 2-7-1996]	

HOPPER, SURGE, 400 LB CAPACITY. A/N: ~~411091~~ ***447656***	D89			PM: (9) [RULE 405, 2-7-1996]	
CONVEYOR, PNEUMATIC, POLYSTYRENE PELLETS, WITH A 10 H.P. BLOWER A/N: ~~411091~~ ***447656***	D91				

APPICATION NO. 447657 – Modification of PO D86408 A/N: 297431

MODIFICATION OF EXISTING FOAM GRINDING, CONVEYING, AND STORAGE (PROCESS 5) BY:

THE ADDITION OF:

- **Three grinders, (D81, D82 and D83)**

Equipment	ID No.	Connected to	RECLAIM Source Type/ Monitoring Unit	Emission and Requirements	Conditions
Process 5: Foam Grinding, Conveying, and Storage					
~~**GRINDER, WORTEX, UNDERPRESS, WITH 1 H.P. NIP ROLL** **A/N: 297431**~~	~~**D31**~~	~~**D42 D43 D44 D45 D46 D47**~~		~~**PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]**~~	~~**D323.1**~~
GRINDER, IRWIN CHESAW, UNDERPRESS A/N: ~~297431~~ ***447657***	D32	D42 D43 D44 D45 D46 D47		PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; ***[RULE 1175, 9-7-2007]***	D323.1
GRINDER, IRWIN CHESAW, UNDERPRESS A/N: ~~297431~~ ***447657***	D33	D42 D43 D44 D45 D46 D47		PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; ***[RULE 1175, 9-7-2007]***	D323.1
GRINDER, IRWIN CHESAW, UNDERPRESS A/N: ~~297431~~ ***447657***	D34	D42 D43 D44 D45 D46 D47		PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; ***[RULE 1175, 9-7-2007]***	D323.1
GRINDER, IRWIN, UNDERPRESS A/N: ~~297431~~ ***447657***	D35	D42 D43 D44 D45 D46 D47		PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; ***[RULE 1175, 9-7-2007]***	D323.1
~~**GRINDER, WORTEX, UNDERPRESS, WITH 1 H.P. NIP ROLL** **A/N: 297431**~~	~~**D36**~~	~~**D42 D43 D44 D45 D46 D47**~~		~~**PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]**~~	~~**D323.1**~~
GRINDER, IRWIN, UNDERPRESS A/N: ~~297431~~ ***447657***	D37	D42 D43 D44 D45 D46 D47		PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; ***[RULE 1175, 9-7-2007]***	D323.1
GRINDER, IRWIN, UNDERPRESS A/N: ~~297431~~ ***447657***	D38	D42 D43 D44 D45 D46 D47		PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; ***[RULE 1175, 9-7-2007]***	D323.1
GRINDER, IRWIN, UNDERPRESS A/N: ~~297431~~ ***447657***	D39	D42 D43 D44 D45 D46 D47		PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; ***[RULE 1175, 9-7-2007]***	D323.1
GRINDER, A, WORTEX, UNDERPRESS, WITH 3 H.P. NIP ROLL A/N: ~~297431~~ ***447657***	D40	D42 D43 D44 D45 D46 D47		PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; ***[RULE 1175, 9-7-2007]***	D323.1

GRINDER, B, WORTEX, UNDERPRESS, WITH 3 H.P. NIP ROLL A/N: ~~297431~~ *447657*	D41	D42 D43 D44 D45 D46 D47		PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; ***[RULE 1175, 9-7-2007]***	D323.1
GRINDER, IRWIN CHESAW, MODEL 50, UNDERPRESS, WITH A 15 H.P MOTOR, AND A BLOWER, 5 H.P. A/N: 447657	***D81 (NEW)***	***D42 D43 D44 D45 D46 D47***		***PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; [RULE 1175, 9-7-2007]***	***D323.1***
GRINDER, IRWIN CHESAW, UNDERPRESS, WITH A 15 HP MOTOR, AND A BLOWER, 5 H.P. A/N: 447657	***D82 (NEW)***	***D42 D43 D44 D45 D46 D47***		***PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; [RULE 1175, 9-7-2007]***	***D323.1***
GRINDER, IRWIN CHESAW, UNDERPRESS, WITH A 25 HP MOTOR, A 30 HP FEED ROLL MOTOR, AND A 5 HP BLOWER A/N: 447657	***D83 (NEW)***	***D42 D43 D44 D45 D46 D47***		***PM: (9) [RULE 405, 2-7-1996]; VOC: (9) [RULE 1175, 5-13-1994]; [RULE 1175, 9-7-2007]***	***D323.1***

APPICATION NO. 447654: MINOR TITLE V FACILITY PERMIT REVISION

REVISION OF TITLE V FACILITY PERMIT DUE TO PERMIT MODIFICATIONS PER RULE 301(1)(7).

PERMIT CONDITIONS

No permit conditions are changed.

BACKGROUND/HISTORY

Pactiv Corp (Pactiv) La Mirada facility manufactures disposable polystyrene foam food service products such as plates, containers, and bowls. Pactiv La Mirada facility is a Title V facility but not RECLAIM.

The initial Title V Permit for the facility was issued on March 26, 2001 and expired on March 25, 2006. A Title V Permit Renewal application was submitted on September 27, 2005, and the proposed renewal permit will be submitted to EPA for review simultaneously with the subject applications.

On August 16, 2005, Pactiv submitted the following applications:

A/N	Type	Previous Permit No.	Equipment
447654	Plan	N/A	Minor Title V Permit Revision
447655	P/C-Modification	F15850 (A/N 333273)	Polystyrene Extrusion reclaim Line R-100
447656	P/C-Modification	F15443 (A/N 333274)	Polystyrene Extrusion reclaim Line R-200
447657	P/C-Modification	D86408 (A/N 297431)	Foam Grinding, Conveying, and Storage

The proposed modifications will allow Pactiv to produce black polystyrene foam in conjunction with the existing white polystyrene foam production.

Application No. 447655 was submitted for modification of the Reclaim Extruder R-100 by the addition of a 5-HP vacuum (suction) pump to the repelletizing extruder (D3). The addition of vacuum pump is to allow the extruder to be operated under a slight vacuum when processing black foams. This method was proved to be more efficient for the black foam reclaim process at another Pactiv facility.

Application No. 447656 was submitted for modification of the Reclaim Extruder Line R-200 by replacing the existing 1,400 lbs surge hopper (D9) and fabric filter (C10) with a new 1,900 lbs surge hopper (D84) and a cartridge filter (C85).

Application No. 447657 was submitted for modification of the Foam Grinding, Conveying, and Storage (Process 5) by addition of two new underpress grinders (D81 and D82) and one new stand alone Chesaw Scrap Grinder (D83) for black foam production.

Application No. 447654 was submitted as a plan for the minor revision of the Title V permit as specified in Rule 301.

PROCESS DESCRIPTION

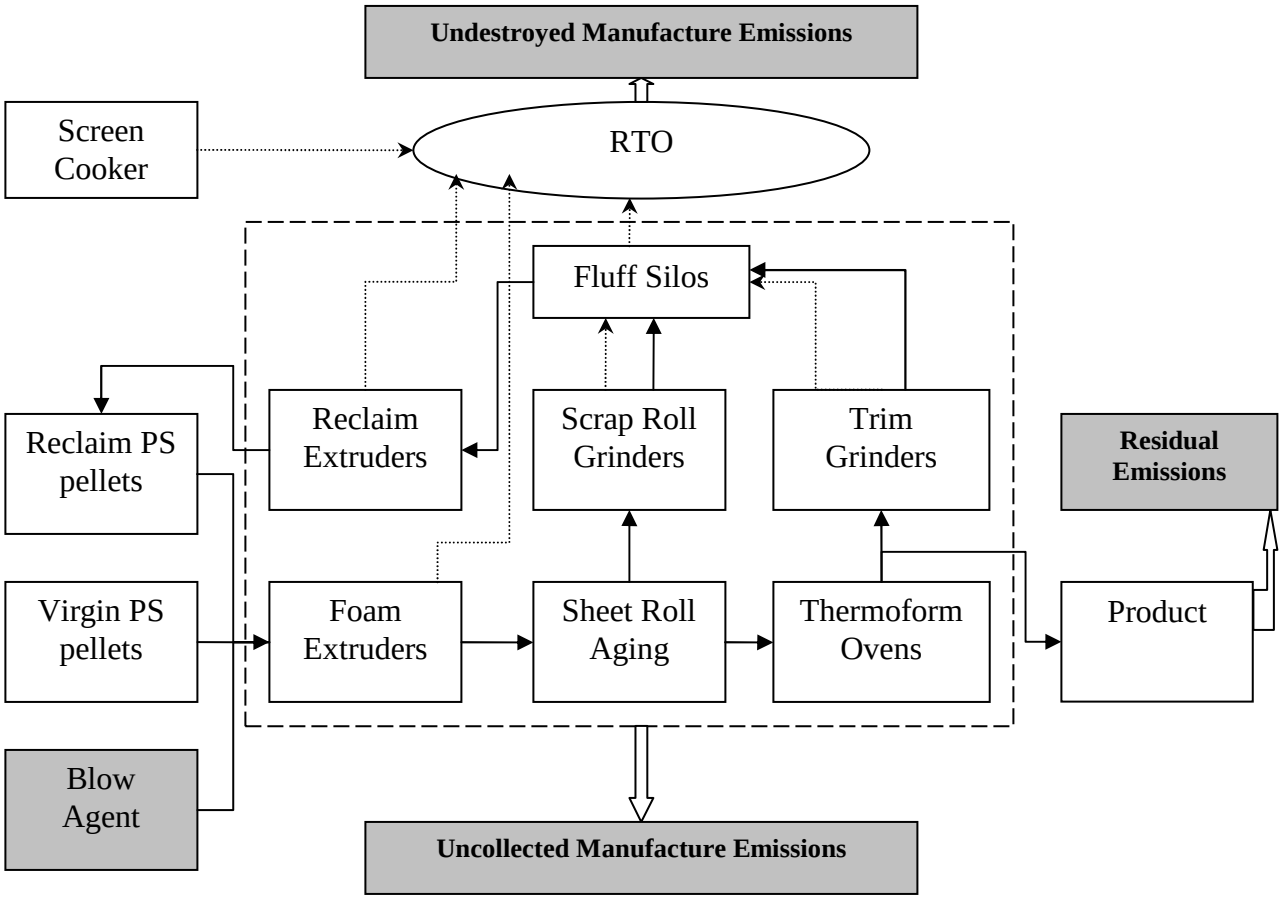
The Pactiv La Mirada facility takes virgin and reclaimed polystyrene pellets to make commercial-use polystyrene foam packaging containers. Polystyrene pellets are taken from storage silos and are fed with a blowing agent, butane (normal or iso-), to two process lines. Each line consists of an extruder that processes the resin pellets into sheets of polystyrene foam. Emissions from the extruders are vented to a regenerative thermal oxidizer (RTO) for volatile organic compound (VOC) control.

From the extruders, the polystyrene sheets are laminated. The laminated sheet then goes to a winder where it is rolled up. The rolled up sheets are then placed in storage to age. After aging, any flawed sheets are removed and sent to scrap bulk grinders. The ground flakes are then sent to the fluff silos. The VOC emissions from the bulk grinders are vented to the fluff silos equipped with filters and then vented to the RTO.

The unblemished polystyrene foam sheets are fed to thermoform ovens to produce foam containers. After the thermoforming step, the excess foam materials at the edges of the containers are cut out (scraps) and removed from the product and fall into a granulating system of underpress grinders positioned below the thermoform ovens. The scraps are then ground into flakes and conveyed to the fluff silo equipped with filters which are in turn vented to the RTO.

Flakes in the fluff silos are fed into one of two reclaim resin extruders and palletizing systems. Flakes are sent to a surge hopper which equipped with filters and then the exhaust conveying air is vented to the RTO. The reclaim extruders are vented to electrostatic precipitators and then to the RTO. Reclaimed pellets are weighed and transferred into a reclaimed resin silo.

The process flow, VOC emissions and the RTO emission controls are shown in the following diagram:



Note: this diagram did not include the PM10 emissions that are controlled by the ESP's and/or filters.

Rule 1175 Compliance Issues

On August 5, 2005, the District issued a Notice of Violation (P46071) to Pactiv for failure to demonstrate compliance with facility permit condition number F2.1, which limits VOC emissions from the facility to be less than 2.4 lbs per 100 lbs of raw material processed (R1175(c)(2)). The NOV was issued based on a source test performed on March 2, 2004. The calculation for the compliance of R1175 at the time was based on a believing of that the "raw material" should not include the reclaim polystyrene pellets and the polystyrene laminate.

On September 7, 2005, Pactiv submitted a petition for variance (case no. 5551-1) from the NOV. The petition was filed because "*Pactiv disagrees with the District's determination and was not aware that the District would issue a NOV until it was served*". In the petition, Pactiv sought a variance until either the District changes its position or the District explains in sufficient detail how the facility can run a compliant facility and test as a compliant facility. The hearing was scheduled on December 1, 2005, and was subsequently rescheduled two times to February 9, 2006.

On February 3, 2006, John Olvera of District Counsel issued a memo concerning the definition of "raw material" in Rule 1175. In this memo John concluded the definition of "raw materials" does not specifically exclude recycled polystyrene beads from its meaning". In addition, John recommended that the Rule be amended to clarify the definition of "raw material," as well as other related provisions, such as Rule 1175(c)(2) in order to facilitate the enforcement of Rule 1175. Based on the District Counsel's conclusion, the previous compliance calculation had to be revised and the facility compliance status had to be re-evaluated. (Meanwhile, a second controversy over the applicability of Rule 1175(c)(2) to the polystyrene foam extrusion operations was raised, despite of the Pactiv's permit shield condition no. M333.1, which provides Pactiv a permit shield from Rule 1175(c)(4). The controversy focused on whether the definition of "expandable polystyrene molding operation" should include the polystyrene foam thermoform operation, such as Pactiv's operation.)

Since then,

February 7, 2006	Pativ withdrew the petition for variance (case no. 5551-1) because the NOV (P46071) had been voided for no violation basis.
March 10, 2006	M&STE issued the third evaluation report (reference no. 04243C) for the source test performed on March 2, 2004. M&STE deemed the Pactiv is in compliance with the limit of Rule 1175(c)(2) if and only if the recycled polystyrene is considered raw material, and "*compliance can be assured on an ongoing basis if the mass of VOC is required to be periodically measured, recorded, and calibrated and if the weights of the rolls from the extruder line are also measured, recorded, and calibrated periodically*".
July 12, 2007	Pactiv had another Rule 1175 compliance source test performed as required under the permit condition no. D28.1. D28.1 requires Pactiv conduct a compliance test once every three years.
September 7, 2007	Rule 1175 was amended. However, it neither made the clarification of "the definition of "raw material," as well as other related provisions, such as Rule 1175(c)(2)" as recommended by John Olvera of the District Counsel, nor did it clarified the differences between "expandable polystyrene molding operation" and "polystyrene foam thermoform operation".
May 20, 2008	Mr. Mohsen Nazemi, DEO of Engineering & Compliance, issued a Rule Implementation Guidance, Rule 1175 – Control of Emissions from the Manufacturing of Polymeric Cellular (Foam) Products. In the Guidance, Mohsen concluded Rule 1175(c)(2) is applicable to polystyrene foam extrusion manufacturing operations.
October 17, 2008	M&STE approved the report (reference no. 07028 REVISED) for the source test performed on July 12, 2007. M&STE deemed the source test results demonstrated that Pactiv is in compliance with R1175(c)(2) only during times that the process uses raw materials that have a VOC content not to exceed 2.24 lb VOC/100 lb of raw material.

Proposed Modification Project

To facilitate the production of black foam, equipment will be added to Process 5: Foam Grinding, Conveying, and Storage. Two new Chesaw underpress grinders (D81 and D82), and one new stand alone Chesaw scrap grinder (D83) are proposed to be added for use in black foam production. The use of dedicated underpress and stand alone grinders for black foam production keeps separated the different color flakes for reclaim use. There is no proposed change in total throughput for the system and therefore the facility emissions will remain unchanged.

Reclaim Extruder R-100 (D3) under System 1: Extruder, Reclaim, R-100 of Process 1: Polystyrene Extrusion Reclaim Lines, will be modified by addition of a Rietschle vacuum pump. The vacuum pump is proposed to improve the performance and efficiency of the reclaim repelletizing process. In black foam production, imperfections are more apparent than white foam. The addition of the Rietschle system would minimize such imperfections by removing target gases at a faster rate, therefore creating a better finished product and minimize the recycle of the black foam.

Process 1: Polystyrene Extrusion Reclaim Lines, System 2: Extruder, Reclaim, R-200 will be modified for system improvement by replacement of the 1,400 pound capacity hopper (D9) with a 1,900 pound capacity hopper (D84) and replacement of the bag type Mikro-Pul fabric filter (C10) with a cartridge type polyester filter (C85).

Pactiv Corporation filed Application Nos. 447654-657 on August 16, 2005, for the proposed modifications indicated above. These modifications are to facilitate production of black polystyrene foam containers which Pactiv is considering to produce in conjunction with their current white polystyrene foam container production.

Pactiv proposes no increase in production throughput. Therefore, no additional PM and VOC emissions from the proposed modification are expected.

This facility operates 24 hrs/day, 7 days/wk, and 52 wks/yr.

EMISSION CALCULATIONS

Condition no. P1.2 limits a production rate of 876 tons/month for the two reclaim extruders (R-100 and R-200). Pactiv did not propose a change to the maximum production throughput. **Therefore, no additional PM and VOC emissions from the proposed modification are expected.**

Application No. 447655 - Reclaim Extruder R-100

VOC emissions:

Reclaim Polystyrene Extrusion Line R-100 is a part of Polystyrene Foam Product Manufacturing Operation, which is subject to Rule 1175. The entire Polystyrene Foam Product Manufacturing Operation will be source tested once every three years (Condition No. D29.1).

PM10 emissions due to pneumatic conveying:

Emission Factor = 5.34 x 10^{-4} lb PM_{10}/lb flake (Developed by Pactiv through extensive testing at their facility. This emission factor is to remain confidential and is proprietary for their operations.)

Pneumatic Conveyor filter (C10) control efficiency = 99%

Condition no. P1.2 limits a production rate of 876 tons/month for the two reclaim extruders (R-100 and R-200). Assume 50% of this material throughput will be processed in R-100, the maximum throughput for the reclaim extruder R-100 is 438 tons/month, or 29,200 lbs/day, or 1,216.67 lbs/hr.

R1 = R2 = (1 – 99%) (1,216.67 lbs/hr) (5.34 x 10^{-4} lb /lb) = 0.00650 lb/hr or 0.156 lb/day

PM10 emissions due to polystyrene flakes extrusion (Reclaim Process):

Assumptions:
80% collection efficiency for the ESP C61 (from die hood and the extruder vent)
99% capture efficiency (based on the fact of that the exhaust from ESP C61 is vented to the RTO C55)
PM Emission Factor for Extruder: 0.0958 lbs/ton plastic[1]
PM_{10} = PM

Note:
1. This Emission Factor was obtained from an Emission Calculation Fact Sheet from Michigan Department of Environmental Quality (FACT SHEET #9847, Rev 11/05).

PM10 emissions due to extrusion:
R1 = (1,216.67 lbs/hr) (0.0958 lb/ton Product) / (2,000 lbs/ton) = 0.0583 lb/hr
R2 = (0.0583 lb/hr) (1 – 80%) + (0.0583 lb/hr) (80%) (1 – 99%) = 0.0121 lb/hr

Total PM10 emissions
R1 = (0.00650 lb/hr) + (0.0583 lb/hr) = 0.0648 lb/hr
R2 = (0.00650 lb/hr) + (0.0121 lb/hr) = 0.0186 lb/hr

Application No. 447656 - Reclaim Extruder Line R-200

Same calculation and results with Reclaim Extruder Line R-100.

Application No. 447657 - Foam Grinding, Conveying, and Storage (Process 5)

VOC emissions:

Foam Grinding, Conveying, and Storage is a part of Polystyrene Foam Product Manufacturing Operation, which is subject to Rule 1175. The entire Polystyrene Foam Product Manufacturing Operation will be source tested once every three years (Condition No. D28.1).

PM10 emissions due to grinding and pneumatic conveying:

Emission Factor = 5.34 x 10^{-4} lb PM_{10}/lb flake (Developed by Pactiv through extensive testing at their facility. This emission factor is to remain confidential and is proprietary for their operations.)

Pneumatic Conveyor filter (C10) control efficiency = 99%

Condition no. P1.2 limits a production rate of 876 tons/month for the two reclaim extruders (R-100 and R-200). Therefore, the process weight for all grinders is 876 tons/month, or 58,400 lbs/day, or 2,433.33 lbs/hr.

R1 = R2 = (1 – 99%) (2,433.33 lbs/hr) (5.34 x 10^{-4} lb /lb) = 0.0130 lb/hr or 0.312 lb/day

EMMISSION SUMMARY

The calculated PM10 emission results and the VOC PTE's obtained from the NSR database are indicated below:

Application No. 447655 - Reclaim Extruder Line R-100

Extruder R-100		HOURLY (lbs/hr)	DAILY (lbs/day)	30DAY AVE. (lbs/day)	30 DAY NSR (lbs/day)	ANNUAL AVE. (lbs/yr)
R1	VOC	64.830	1555.92	1555.92	1,556	566,355
R2	VOC	14.310	343.44	343.44	343	125,012
R1	PM10	0.0648	1.56	1.56	2	566
R2	PM10	0.0186	0.45	0.45	0	162

Daily (lbs/day) = (Hourly, lbs/hr) (24 hr/day)
Annually (lbs/yr) = (daily, lbs/hr) (7 day/wk) (52 wk/yr)
30-day average = (Daily, lbs/day)

Application No. 447656 - Reclaim Extruder Line R-200

Extruder R-200		HOURLY (lbs/hr)	DAILY (lbs/day)	30DAY AVE. (lbs/day)	30 DAY NSR (lbs/day)	ANNUAL AVE. (lbs/yr)
R1	VOC	64.830	1555.92	1555.92	1,556	566,355
R2	VOC	14.310	343.44	343.44	343	125,012
R1	PM10	0.0648	1.56	1.56	2	566
R2	PM10	0.0186	0.45	0.45	0	162

Daily (lbs/day) = (Hourly, lbs/hr) (24 hr/day)
Annually (lbs/yr) = (daily, lbs/hr) (7 day/wk) (52 wk/yr)

30-day average = (Daily, lbs/day)

Application No. 447657 - Foam Grinding, Conveying, and Storage (Process 5)

Foam Grinding (Process 5)		HOURLY (lbs/hr)	DAILY (lbs/day)	30DAY AVE. (lbs/day)	30 DAY NSR (lbs/day)	ANNUAL AVE. (lbs/yr)
R1	VOC	56.64	1359.36	1359.36	1,359	494,807
R2	VOC	12.28	294.72	294.72	295	107,278
R1=R2	PM10	0.013	0.31	0.31	0	114

Daily (lbs/day) = (Hourly, lbs/hr) (24 hr/day)
Annually (lbs/yr) = (daily, lbs/hr) (7 day/wk) (52 wk/yr)
30-day average = (Daily, lbs/day)

RULES AND REGULATIONS EVALUATION

Rule 212: **Standards for Approving Permits** – The facility is not located within 1,000 feet of a K-12 school (A location map can be viewed in Appendix A), and there is no emission increase with this modification project. A Public Notice is not required.

Rule 401: **Visible Emissions** – Compliance is expected from well maintained and properly operated equipment.

Rule 402: **Public Nuisance** – With proper operation and maintenance, the equipment is not likely to create a public nuisance.

Rule 1175: **Control of Emissions from the Manufacture of Polymeric Cellular (Foam) Products**
On October 17, 2008, M&STE approved the report (reference no. 07028 REVISED) for the source test performed on July 12, 2007. M&STE deemed the source test results demonstrated that Pactiv is in compliance with R1175(c)(2). In addition, Condition No. D29.1 is added to ensure future compliance with this rule.

REG XIII: **New Source Review** - There are no emission increase associated with proposed modification project. No emission offset is required for this project.

Rule 1401: There is no toxic air contaminant associated with this modification project. Risk assessment is not required.

Reg XXX: **Title V Permit**
Pactiv Corp (Facility ID: 021474) has an active Title V permit. Based on the above evaluation, the proposed equipment modification will not result in an increase in emission of any criteria air pollutant or any air toxic contaminant. The Proposed modification project (Application Nos. 447655, 447566 and 447657) is therefore considered a Minor Permit Revision of Pactiv's Title V Facility Permit and it is subject to a 45-day EPA review prior to final revision of the Title V Facility Permit (Application No. 447654).

CONCLUSION AND RECOMMENDATIONS

Based on this evaluation, it is expected that the subject equipment will be operated in compliance with all applicable District Rules and Regulations. The Permit to Construct is recommended to be issued.